This document gives pertinent information concerning the reissuance of the Virginia Pollutant Discharge Elimination System (VPDES) permit listed below. This permit is being processed as a Minor, Industrial permit. The industrial wastewater and stormwater discharges result from the operation of a bulk petroleum fuel storage and distribution center. This permit action consists of updating the proposed effluent limits to reflect the current Virginia Water Quality Standards (effective January 6, 2011) and updating permit language as appropriate. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards (WQS) of 9VAC25-260-00 et seq.

1.	Facility Name and Mailing Address:	Kinder Morgan Southeast Terminals, LLC – Newington 2 8206 Terminal Road Lorton, VA 22079	SIC Code :	4226 – Petroleum and Chemical Bulk Stations and Terminals for Hire
	Facility Location:	8206 Terminal Road Lorton, VA 22079	County:	Fairfax
	Facility Contact Name:	Mr. Patrick Davis	Telephone Number:	(804) 743-5778
	Facility E-mail Address:	JPatrick_Davis@kindermorgan.com		
2.	Permit No.:	VA0001988	Expiration Date of previous permit:	March 27, 2015
	Other VPDES Permits associated with this facility:		None	
	Other Permits associated with this facility:		Air – Registration Number 70234 (Title V) Hazardous Waste – VAD000607986	
	E2/E3/E4 Status:	Not Applicable (NA)		
3.	Owner Name:	Kinder Morgan Southeast Terminals, LLC		
	Owner Contact/Title:	Mr. Robert McKinley / Manger of Operations	Telephone Number:	(804) 743-5723
	Owner E-mail Address:	Robert_McKinley@kindermorgan.com		
4.	Application Complete Date:	November 2014		
	Permit Drafted By:	Susan Mackert	Date Drafted:	August 18, 2015
	Draft Permit Reviewed By:	Alison Thompson	Date Reviewed:	August 31, 2015
	Public Comment Period :	Start Date: October 3, 2015	End Date:	November 2, 2015

5. Receiving Waters Information:

Receiving Stream Name :	Accotink Creek, UT	Stream Code:	1a-XNV
Drainage Area at Outfall:	< 5 square miles*	River Mile:	1.28
Stream Basin:	Potomac River	Subbasin:	Potomac River
Section:	7	Stream Class:	III
Special Standards:	b	Waterbody ID:	VAN-A15R
7Q10 Low Flow:	0 MGD	7Q10 High Flow:	0 MGD
1Q10 Low Flow:	0 MGD	1Q10 High Flow:	0 MGD
30Q10 Low Flow:	0 MGD	30Q10 High Flow:	0 MGD
Harmonic Mean Flow:	0 MGD	30Q5 Flow:	0 MGD

*Staff determined that the drainage area for Outfall 001 is less than five square miles. Based on a drainage area of five square miles or less, critical flows will be equal to zero.

6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

X	State Water Control Law	___	EPA Guidelines
X	Clean Water Act	X	Water Quality Standards
X	VPDES Permit Regulation	___	Other
X	EPA National Pollutant Discharge Elimination System (NPDES) Regulation		

7. Licensed Operator Requirements: NA

8. Reliability Class: NA

9. Permit Characterization:

X	Private	___	Effluent Limited	___	Possible Interstate Effect
___	Federal	X	Water Quality Limited	___	Compliance Schedule Required
___	State	X	Whole Effluent Toxicity Program Required	___	Interim Limits in Permit
___	WTP	___	Pretreatment Program Required	___	Interim Limits in Other Document
___	TMDL	X	e-DMR Participant		

10. Wastewater Sources and Treatment Description:

The Kinder Morgan Newington 2 facility is a bulk petroleum storage and distribution terminal located on Terminal Road in Lorton, Virginia. The terminal receives gasoline, diesel, ethanol, and jet kerosene (Jet A) via petroleum pipelines which is then stored in numerous above ground storage tanks (ASTs) located within a diked area of the property. Fuel additives are received by bulk truck delivery. Final product is distributed by tanker truck.

Outfall 001
Stormwater is conveyed through storm drains, underground piping, or via overland flow to a retention pond at the southwest corner of the facility. Discharge from the retention pond is controlled by a manual discharge valve with ultimate discharge via Outfall 001. Stormwater flow from various sources is routed to the retention pond:

- The ASTs are located within a diked area. Stormwater is contained within this diked area by a manually operated gate valve that is maintained in the closed position. There are several drains within the AST area that all drain to the gate valve. Following inspection of the contained stormwater, the gate valve is manually opened and the stormwater is released via underground piping to an oil-water separator and then into the retention pond.

- The truck loading rack area is paved, covered, and surrounded by a low containment curb. Stormwater that may collect beneath the loading rack roof flows to separate drains within each truck bay which is connected to a lading rack sump pit. Any fluid collected in the sump is pumped via underground piping to an AST where it is sent offsite for recycling.

- The paved areas on site consist of parking lots and vehicle traffic areas around the loading rack. Stormwater flow from the paved areas is collected in several drains and flows by gravity through underground piping to the oil-water separator and then into the retention pond. During large storm events, sheet flow from the parking are can bypass the oil-water separator and flow directly to the retention pond.

Internal Outfall 101
This outfall addresses the discharges from hydrostatic test waters associated with any of the tanks within the terminal to the retention pond. Subsequent to the submittal of the permit application, Kinder Morgan staff expressed interest in having this outfall removed with this reissuance noting that if a hydrostatic test is required, they will obtain coverage under *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests* (9VAC25-120 et seq.). It should be noted that this outfall has not discharged in the last three years.

Given this discharge source would continue to be covered under another VPDES permit, it is staff's best professional judgement that Internal Outfall 101 be removed with this reissuance. Staff believes there is no reasonable potential for the removal of this outfall to create any instream excursion of any applicable State narrative or numerical Water Quality Standard.

See Attachment 1 for the NPDES Permit Rating Worksheet.

See Attachment 2 for a facility schematic/diagram.

TABLE 1 – Outfall Description

Outfall Number	Discharge Sources	Treatment	Flow	Outfall Latitude and Longitude
001	Industrial Wastewater/Stormwater*	Sedimentation	0.03 MGD**	38° 43′ 52″ N 77° 11′ 38″ W

*While hydrostatic testing discharges will now be covered under a separate permit, the discharge from Outfall 001 may contain hydrostatic test water as a component.

** Flow volume was confirmed with the facility subsequent to the application package being received. The flow shown above in Table 1 may differ from that found within the permit application.

11. Solids Treatment and Disposal Methods:

Kinder Morgan Newington 2 is an existing bulk petroleum fuel storage and distribution center that does not treat domestic sewage and does not produce sewage sludge.

12. Monitoring Stations and Discharges in Vicinity of Discharge:

The monitoring stations and facilities listed below are either located in or discharge to the following waterbody: VAN-A15R.

TABLE 2 – Monitoring Stations and Discharges	
1aACO002.50	DEQ ambient monitoring station at Route 1.
1aACO004.84	DEQ ambient monitoring station at Route 611 (Telegraph Road).
1aACO006.10	DEQ ambient monitoring station at Route 790.
1aACO009.14	DEQ biological monitoring station upstream of Route 636 and Fairfax County Parkway.
VA0001945	Kinder Morgan Southeast Terminals, LLC (Accotink Creek, UT)
VA0002283	Motiva Enterprises, LLC – Fairfax (Crook Branch)
VAG250126	AT&T Oakton Office Park (Accotink Creek, UT)
VAG406519	Margaret Bardwell Residence (Accotink Creek, UT)
VAG750224	Enterprise Rent A Car (Calamo Branch, UT)
VAG750226	Enterprise Rent A Car (Accotink Creek, UT)
VAG750238	Ravensworth Collision Center (Accotink Creek, UT)
VAG110046	Newington Concrete (Accotink Creek, UT)
VAG110069	Virginia Concrete - Mid Atlantic Materials (Accotink Creek, UT)
VAR051042	SICPA Securink Corporation (Accotink Creek)
VAR051047	Fairfax County – Connector Bus Yard (Long Branch)
VAR051066	U.S. Postal Service – Merrifield (Long Branch, UT)
VAR051080	U.S. Army – Fort Belvoir (Accotink Creek)
VAR051565	Rolling Frito Lay Sales (Accotink Creek)

TABLE 2 – Monitoring Stations and Discharges (Continued)	
VAR051719	National Asphalt Paving Company (Accotink Creek)
VAR051770	Fairfax County – Jermantown Maintenance Facility (Accotink Creek)
VAR051771	Fairfax County – Newington Maintenance Facility (Long Branch)
VAR051772	Fairfax County – DVS – Alban Maintenance Facility (Field Lark Branch)
VAR051795	HD Supply (Accotink Creek)
VAR051863	United Parcel Service – Newington (Accotink Creek)
VAR052188	Milestone Metals (Long Branch, UT)
VAR052223	Newington Solid Waste Vehicle Facility (Long Branch, UT)

13. Material Storage:

A current list of materials stored on site was provided by the facility as part of the permit application package. This information is found as Attachment 3.

14. Site Inspection:

Performed by Beth Biller on February 5, 2015, with Jennifer Carlson in attendance. The site memo can be found as Attachment 4.

15. Receiving Stream Water Quality and Water Quality Standards:

a. Ambient Water Quality Data

This facility discharges into an unnamed tributary to Accotink Creek, which has not been monitored or assessed. There is a downstream DEQ ambient monitoring station located on Accotink Creek. Station 1aACO004.84 is located at the Route 611 bridge crossing, approximately 1.32 miles downstream of Outfall 001. The following is the water quality summary for this segment of Accotink Creek, as taken from the 2012 Integrated Report:

Class III, Section 7, special standards - b.

DEQ monitoring stations located in this segment of Accotink Creek:

- Ambient monitoring station 1aACO002.50 at Route 1
- Ambient monitoring station 1aACO004.84 at Route 611 (Telegraph Road)
- Ambient monitoring station 1aACO006.10 at Route 790
- Biological monitoring station 1aACO009.14 upstream of Route 636 and Fairfax County Parkway

The fish consumption use is assessed as not supporting due to data collected previously at DEQ's fish tissue / sediment station at Route 611. Fish tissue data revealed exceedances of the water quality criterion based tissue value (TV) of 20 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in fish tissue which were recorded in tissue from three species of fish (America eel, redbreast sunfish and rainbow trout) in 2004. Also, at station 1aACO002.50 in 2005, Semi Permeable Membrane Device (SPMD) data revealed an exceedance of the human health criteria of 0.63 parts per billion (ppb) polychlorinated biphenyls (PCBs), which is noted as an observed effect. Additionally, exceedances of the water quality criterion based tissue value (TV) for heptachlor epoxide and dieldrin were also noted by observed effects for the 2008 assessment. These observed effects will remain.

E. coli monitoring finds a bacterial impairment, resulting in an impaired classification for the recreation use. A bacterial Total Maximum Daily Load (TMDL) has been completed and Environmental Protection Agency (EPA) approved for this segment.

Biological monitoring finds benthic macroinvertebrate impairments, resulting in an impaired classification for the aquatic life use.

The wildlife use is considered fully supporting.

b. 303(d) Listed Stream Segments and Total Maximum Daily Loads (TMDLs)

Table 3 – Downstream Impairment Information (2012 Integrated Report)

Waterbody Name	Impaired Use	Cause	Distance From Outfall	TMDL completed	Wasteload Allocation (WLA)	Basis for WLA	TMDL Schedule
Accotink Creek	Recreation	*E. coli*	1.28 miles	Lower Accotink Creek Watershed Bacteria TMDL 12/18/2008	None	Not expected to discharge pollutant	---
	Aquatic Life	Benthic Macroinvertebrates		No	---	---	2016
	Fish Consumption	PCBs		No	---	---	2022
Pohick Bay*	Aquatic Life	pH	4.8 miles	---	---	---	2024

*Please note that in the draft 2014 Integrated Assessment, the tidal Accotink Bay segment (as well as Pohick Bay) is listed with a dissolved oxygen impairment for the aquatic life use. The Accotink Bay segment is located approximately 2.3 miles downstream of Outfall 001. The dissolved oxygen impairment will be covered by the completed TMDL for the Chesapeake Bay watershed; however the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

Significant portions of the Chesapeake Bay and its tributaries are listed as impaired on Virginia's 303(d) list of impaired waters for not meeting the aquatic life use support goal, and the 2012 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report indicates that much of the mainstem Bay does not fully support this use support goal under Virginia's Water Quality Assessment guidelines. Nutrient enrichment is cited as one of the primary causes of impairment. EPA issued the Bay TMDL on December 29, 2010. It was based, in part, on the Watershed Implementation Plans developed by the Bay watershed states and the District of Columbia.

The Chesapeake Bay TMDL addresses all segments of the Bay and its tidal tributaries that are on the impaired waters list. As with all TMDLs, a maximum aggregate watershed pollutant loading necessary to achieve the Chesapeake Bay's water quality standards has been identified. This aggregate watershed loading is divided among the Bay states and their major tributary basins, as well as by major source categories [wastewater, urban stormwater, onsite/septic agriculture, air deposition]. Fact Sheet Section 17.d provides additional information on specific nutrient monitoring for this facility to implement the provisions of the Chesapeake Bay TMDL.

The full planning statement is found in Attachment 5.

c. Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, an unnamed tributary to Accotink Creek, is located within Section 7 of the Potomac River Basin, and classified as a Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C, and maintain a pH of 6.0-9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving stream.

Ammonia:

The freshwater, aquatic life Water Quality Criteria for Ammonia are dependent on the instream and/or effluent temperature and pH. The 90th percentile temperature and pH values are used because they best represent the critical design conditions of the receiving stream. Because neither instream nor effluent data is available for temperature, staff utilized a default temperature value of 25°C. It is staff's best professional judgement that a default pH value of 8.0 S.U. is suitable to calculate the ammonia water quality standards in lieu of calculating the 90th percentile pH value from the facility's actual discharge data as ammonia, as N, is generally not a parameter of concern. This is due to the fact the discharge is industrial in nature and there is no reasonable potential to exceed the ammonia criteria. And as such, limit derivation is not warranted.

The ammonia water quality standards calculations are shown in Attachment 6.

Metals Criteria:

The Water Quality Criteria for some metals are dependent on the receiving stream's hardness (expressed as mg/L calcium carbonate). There is no Total Hardness data for this facility. Staff guidance suggests using a default hardness value of 50 mg/L $CaCO_3$ for streams east of the Blue Ridge. The hardness-dependent metals criteria in Attachment 6 are based on this default value.

d. Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes, and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, an unnamed tributary to Daniels Run, is located within Section 7 of the Potomac River Basin. This section has been designated with a special standard of "b".

Special Standard "b" (Potomac Embayment Standards) established effluent standards for all sewage plants discharging into Potomac River embayments and for expansions of existing plants discharging into non-tidal tributaries of these embayments. 9VAC25-415, Policy for the Potomac Embayments controls point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River, and their tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 Bridge in King George County. The Potomac Embayment Standards are not applied to this industrial discharge since the discharge does not contain the pollutants of concern in appreciable amounts.

16. Antidegradation (9VAC25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1because of the highly developed receiving stream watersheds in Fairfax County (Accotink Creek) and the District of Columbia metropolitan area (Potomac River), and the water quality impairments listed for Accotink Creek. The permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving streams, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLA) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLA's are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency, and statistical characteristics of the effluent data.

a. Effluent Screening:

Effluent data obtained from the permit application and Discharge Monitoring Report (DMR) forms has been reviewed and determined to be suitable for evaluation. Effluent data from the current permit cycle were reviewed, and there have been no exceedances of the established limitations.

b. Mixing Zones and Wasteload Allocations (WLAs):

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f) (Q_s)] - [(C_s) (f) (Q_s)]}{Q_e}$$

Where:
- WLA = Wasteload allocation
- C_o = In-stream water quality criteria
- Q_e = Design flow
- Q_s = Critical receiving stream flow (1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; 30Q10 for ammonia criteria; harmonic mean for carcinogen-human health criteria; and 30Q5 for non-carcinogen human health criteria)
- f = Decimal fraction of critical flow
- C_s = Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 is considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C_o.

c. Effluent Limitations

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9VAC25-31-230.D requires that monthly and weekly average limitations be imposed for continuous discharges from Publicly Owned Treatment Works (POTW) and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

1) Outfall 001

Total Petroleum Hydrocarbons:

The TPH maximum limit of 15 mg/L shall be carried forward with this permit reissuance. The limit is based on the ability of simple oil-water separator technology to recover free product from water. Wastewater discharged without a visible sheen is generally expected to meet this effluent limitation. The quarterly monitoring frequency (1/3M) for TPH shall be carried forward with this reissuance.

Total Suspended Solids (TSS):

The TSS maximum limit of 60 mg/L shall be carried forward with this permit reissuance. The limit is included with the permit to ensure proper operation and maintenance of the stormwater impoundment basin. The limit was derived from requirements at other industrial activities providing sedimentation of storm water runoff. The quarterly monitoring frequency (1/3M) for TPH shall be carried forward with this reissuance.

pH:

pH limitations are set at the water quality criteria. The quarterly monitoring frequency (1/3M) for pH shall be carried forward with this reissuance.

d. Nutrient Monitoring

EPA's Chesapeake Bay TMDL (December 29, 2010) included wasteload allocations for VPDES permitted industrial stormwater facilities as part of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the Phase I Chesapeake Bay TMDL Watershed Implementation Plan (WIP), including the number of industrial stormwater permits per county and the number of urban acres regulated by industrial stormwater permits, as part of their development of the aggregate load. Aggregate loads for industrial stormwater facilities were appropriate because actual facility loading data were not available to develop individual facility wasteload allocations. Virginia estimated the loadings from industrial stormwater facilities using actual and estimated facility acreage information, and Total Phosphorus (TP), Total Nitrogen (TN), and Total Suspended Solids (TSS) loading values from the Northern Virginia Planning District Commission (NVPDC) Guidebook for Screening Urban Nonpoint Pollution Management Strategies, prepared for the Metropolitan Washington Council of Governments (November, 1979).

1) Outfall 001

Nutrients:

To protect the Water Quality Standards of the Chesapeake Bay and to address the benthic impairment in Accotink Creek, monitoring for Nitrate+Nitrite, Total Kjeldahl Nitrogen (TKN), Total Nitrogen (TN), and Total Phosphorus (TP) are proposed for this reissuance. Actual facility area information and the TP and TN data required in this section, as well as the TSS data required elsewhere in this permit, will be used by the Board to quantify the nutrient and sediment loads from VPDES permitted industrial stormwater facilities, and will be submitted to EPA to aid them in further refinements to their Chesapeake Bay TMDL model. The loading information will also be used by the board to determine any additional load reductions needed for industrial stormwater facilities for the next reissuance of this permit. A semi-annual monitoring frequency (1/6M), for a total of four sampling events, is proposed with this reissuance. See Part III of the permit for additional calculation and reporting requirements.

e. Effluent Limitations and Monitoring Summary

Limits were established for Total Suspended Solids, Total Petroleum Hydrocarbons, and pH.

Monitoring and/or reporting was established for Total Kjeldahl Nitrogen, Nitrate+Nitrite, Total Nitrogen, and Total Phosphorus.

The limits for Total Petroleum Hydrocarbons are based on the ability of simple oil-water separator technology to recover free product from water and Best Professional Judgement.

The limits for Total Suspended Solids are based on Best Professional Judgement.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual.

18. Antibacksliding:

a. Outfall 101

This outfall addresses the discharges from hydrostatic test waters associated with any of the tanks within the terminal to the retention pond. Staff believes there is no reasonable potential for the removal of this outfall to create any instream excursion of any applicable State narrative or numerical Water Quality Standard given this discharge source would continue to be covered under another VPDES permit, the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests* (9VAC25-120 et seq.).

19. Effluent Limitations/Monitoring Requirements: Outfall 001 (Retention Pond)

Average Flow: 0.03 MGD
Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/3M	Estimate
pH	2	NA	NA	6.0 S.U.	9.0 S.U.	1/3M	Grab
Total Suspended Solids (TSS)	1	NA	NA	NA	60 mg/L	1/3M	Grab
Total Petroleum Hydrocarbons(TPH)[a]	1	NA	NA	NA	15 mg/L	1/3M	Grab
Total Nitrogen[b,c]	1	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[c]	1	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[c]	1	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[c]	1	NA	NA	NA	NL (mg/L)	1/6M	Grab
Acute Toxicity – *C. dubia*[NOAEC]	1	NA	NA	NA	NL(%)	1/YR	Grab
Acute Toxicity – *P. promelas*[NOAEC]	1	NA	NA	NA	NL(%)	1/YR	Grab

The basis for the limitations codes are:
1. Best Professional Judgement
2. Water Quality Standards

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.

1/3M = Once every three months.
1/6M = Once every six months.
1/YR = Once every year.

1/3M = The quarterly monitoring periods shall be January 1 - March 31, April 1 - June 30, July 1 - September 30 and October 1 - December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (April 10, July 10, October 10 and January 10, respectively).
1/6M = The semiannual monitoring periods shall be January through June and July through December. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).
Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.
Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Total Petroleum Hydrocarbons Requirements:

a. Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

Nutrient Requirements:

b. Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 and shall be calculated from the results of those tests.

c. Monitoring and reporting are only required during the first two years of the permit term (i.e., the first four monitoring periods).

20. Polychlorinated Biphenyls (PCBs):

Accotink Creek, which is located approximately 1.3 miles downstream from Outfall 001, is listed with a PCB impairment. This impairment was first listed in the 2010 Integrated Assessment. In support of the PCB TMDL that is scheduled for development by 2022, this facility is a candidate for PCB monitoring. The SIC code for this facility (4226) is not specifically identified in the PCB Monitoring Guidance (09-2001) as a facility type that is subject to PCB monitoring, however the guidance allows other industrial facilities to be identified for monitoring based on additional information or staff recommendations. Total PCB results have been generated from sampling conducted at VPDES permitted facilities statewide since 2009. PCB data from Petroleum Bulk Station and Terminal facilities indicate that effluent from these facilities has potential to contain PCBs in concentrations greater than the Virginia water quality criteria (640 pg/L). Based on this information, DEQ staff recommends that this facility perform low-level PCB monitoring during the upcoming permit cycle. It is recommended that this facility collect two samples using EPA Method 1668, which is capable of detecting low-level concentrations for all 209 PCB congeners. PCB data generated using Method 1668 revisions A, B, and C are acceptable; however, data generated using version A is preferred.

21. Other Permit Requirements:

a. Part I.B of the permit contains quantification levels and compliance reporting instructions. 9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

b. Permit Section Part I.C details the requirements for Whole Effluent Toxicity (WET) Program. The VPDES Permit Regulation at 9VAC25-31-210 requires monitoring and 9VAC25-31-220.I, requires limitations in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Law and the Clean Water Act. A WET Program is imposed for municipal facilities with a design rate >1.0 MGD, with an approved pretreatment program or required to develop a pretreatment program, or those determined by the Board based on effluent variability, compliance history, IWC, and receiving stream characteristics. See Attachment 7 for a review of the most recent test results.

22. Other Special Conditions:

a. O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; VPDES Permit Regulation, 9VAC25-31-190.E and 40 CFR 122.41(e). The permittee shall maintain a current Operations and Maintenance (O&M) Manual. The permittee shall operate the facility in accordance with the O&M Manual and shall make the O&M Manual available to Department personnel for review upon request. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.

b. Water Quality Criteria Reopener. The VPDES Permit Regulation at 9VAC25-31-220 D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

c. Notification Levels. Required by VPDES Permit Regulation 9VAC-31-200A for all manufacturing, commercial, mining, and silvacultural discharges. The permittee shall notify the Department as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
   (a) One hundred micrograms per liter;
   (b) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
   (c) Five times the maximum concentration value reported for that pollutant in the permit application; or
   (d) The level established by the Board.

2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
   (a) Five hundred micrograms per liter;

(b) One milligram per liter for antimony;
(c) Ten times the maximum concentration value reported for that pollutant in the permit application; or
(d) The level established by the Board.

d. Materials Handling/Storage. 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.

e. Oil Storage Ground Water Monitoring Reopener. As this facility currently manages ground water in accordance with 9VAC25-90-10 et seq., Oil Discharge Contingency Plans and Administration Fees for Approval, this permit does not presently impose ground water monitoring requirements. However, this permit may be modified or alternately revoked and reissued to include ground water monitoring not required by the ODCP regulation.

f. No Discharge of Detergents, Surfactants, or Solvents to the Oil/Water Separators. This special condition is necessary to ensure that the oil/water separators' performance is not impacted by compounds designed to emulsify oil. Detergents, surfactants, and some other solvents will prohibit oil recovery by physical means.

g. Oil Storage Ground Water Monitoring Reopener. As this facility currently manages ground water in accordance with 9VAC25-90-10 et seq., Oil Discharge Contingency Plans (ODCP) and Administration Fees for Approval, this permit does not presently impose ground water monitoring requirements. However, this permit may be modified or alternately revoked and reissued to include ground water monitoring not required by the ODCP regulation.

h. PCB Monitoring. This special condition requires the permittee to conduct PCB monitoring using ultra-low level PCB analysis to support the development of the PCB TMDL for the fish consumption use impairment in Accotink Creek.

i. TMDL Reopener. This special condition is to allow the permit to be reopened if necessary to bring it in compliance with any applicable TMDL that may be developed and approved for the receiving stream.

Permit Section Part II. Required by VPDES Regulation 9VAC25-31-190, Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

Permit Section Part III. Details Industrial Stormwater Management Requirements. Industrial storm water discharges may contain pollutants in quantities that could adversely affect water quality. Storm water discharges which are discharged through a conveyance or outfall are considered point sources and require coverage by a VPDES permit. The primary method to reduce or eliminate pollutants in storm water discharges from an industrial facility is through the use of best management practices (BMPs). Storm Water Management Plan requirements are derived from the VPDES General Permit for Storm Water Discharges Associated with Industrial Activity, 9VAC25-151 et seq.

23. Changes to the Permit from the Previously Issued Permit:

a. Special Conditions:

1. The O&M special condition has been revised to be consistent with current agency practice.
2. The Hydrostatic Testing special condition was removed with this reissuance. The permittee shall obtain coverage under the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests* if hydrostatic testing is required.
3. A No Discharge of Detergents, Surfactants, or Solvents to the Oil/Water Separators special condition was added with this reissuance to be consistent with permits issued to bulk terminal facilities.
4. An Oil Storage Ground Water Monitoring Reopener special condition was added with this reissuance to be consistent with permits issued to bulk terminal facilities.
5. A PCB sampling special condition was added with this reissuance.

b. Monitoring and Effluent Limitations:

1. Monitoring for Total Kjeldahl Nitrogen, Nitrate+Nitrite, and Total Phosphorus has been added to Outfall 001.
2. Reporting of Total Nitrogen has been added to Outfall 001.
3. Internal Outfall 101, and all associated requirements, has been removed from the permit. Coverage shall be obtained under the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests.*
4. Toxicity Monitoring Program (TMP) language has been changed to Whole Effluent Toxicity (WET) testing to be consistent with current agency practice.
5. The WET requirement for alternating species was removed with this reissuance to be consistent with current agency practice. Annual acute toxicity testing using both test species, *C. dubia and P. promelas*, was implemented with this reissuance.

c. Other:

1. Stormwater language was updated to reflect that found within the 2014 – 2019 *General VPDES Permit for Storm Water Discharges Associated with Industrial Activity.*

24. Variances/Alternate Limits or Conditions: NA

25. Public Notice Information:
First Public Notice Date: October 2, 2015 Second Public Notice Date: October 9, 2015

Public Notice Information is required by 9VAC25-31-280 B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3853, susan.mackert@deq.virginia.gov. See Attachment 8 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

26. Additional Comments:

Previous Board Action(s): None

Staff Comments: None

Public Comment: No comments were received during the public notice.

Fact Sheet Attachments – Table of Contents

Kinder Morgan Newington 2
VA0001988

2015 Reissuance

NPDES PERMIT RATING WORK SHEET

[X] Regular Addition
[ ] Discretionary Addition
[ ] Score change, but no status Change
[ ] Deletion

VPDES NO. : VA0001988

Facility Name: Kinder Morgan Southeast Terminals, LLC – Newington 2
City / County: Lorton / Fairfax
Receiving Water: Accotink Creek, UT
Waterbody ID: VAN-A15R

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power Plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rater

[ ] Yes; score is 600 (stop here) [x] NO; (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

[ ] YES; score is 700 (stop here)
[x] NO; (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary Sic Code: **4226** Other Sic Codes: _____ _____ _____

Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
[x] No process waste streams	0	0	[ ] 3.	3	15	[ ] 7.	7	35
[ ] 1.	1	5	[ ] 4.	4	20	[ ] 8.	8	40
[ ] 2.	2	10	[ ] 5.	5	25	[ ] 9.	9	45
			[ ] 6.	6	30	[ ] 10.	10	50

Code Number Checked: 0

Total Points Factor 1: 0

FACTOR 2: Flow/Stream Flow Volume (Complete either Section A or Section B; check only one)

Section A – Wastewater Flow Only considered

Wastewater Type (see Instructions)			Code	Points
Type I:	Flow < 5 MGD	[ ]	11	0
	Flow 5 to 10 MGD	[ ]	12	10
	Flow > 10 to 50 MGD	[ ]	13	20
	Flow > 50 MGD	[ ]	14	30
Type II:	Flow < 1 MGD	[x]	21	10
	Flow 1 to 5 MGD	[ ]	22	20
	Flow > 5 to 10 MGD	[ ]	23	30
	Flow > 10 MGD	[ ]	24	50
Type III:	Flow < 1 MGD	[ ]	31	0
	Flow 1 to 5 MGD	[ ]	32	10
	Flow > 5 to 10 MGD	[ ]	33	20
	Flow > 10 MGD	[ ]	34	30

Section B – Wastewater and Stream Flow Considered

Wastewater Type (see Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow		Code	Points
Type I/III:	< 10 %	[ ]	41	0
	10 % to < 50 %	[ ]	42	10
	> 50%	[ ]	43	20
Type II:	< 10 %	[ ]	51	0
	10 % to < 50 %	[ ]	52	20
	> 50 %	[ ]	53	30

Code Checked from Section A or B: 21

Total Points Factor 2: 10

NPDES PERMIT RATING WORK SHEET

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) [ ] BOD [ ] COD [ ] Other: NA

Permit Limits: (check one)	Code	Points
[ ] < 100 lbs/day	1	0
[ ] 100 to 1000 lbs/day	2	5
[ ] > 1000 to 3000 lbs/day	3	15
[ ] > 3000 lbs/day	4	20

Code Number Checked: NA

Points Scored: 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)	Code	Points
[x] < 100 lbs/day	1	0
[ ] 100 to 1000 lbs/day	2	5
[ ] > 1000 to 5000 lbs/day	3	15
[ ] > 5000 lbs/day	4	20

Code Number Checked: 1

Points Scored: 0

C. Nitrogen Pollutants: (check one) [ ] Ammonia [x] Other: NA

Permit Limits: (check one)	*Nitrogen Equivalent*	Code	Points
[ ]	< 300 lbs/day	1	0
[ ]	300 to 1000 lbs/day	2	5
[ ]	> 1000 to 3000 lbs/day	3	15
[ ]	> 3000 lbs/day	4	20

Code Number Checked: NA

Points Scored: 0

Total Points Factor 3: 0

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

[ ] YES; (If yes, check toxicity potential number below)

[x] NO; (If no, go to Factor 5)

Determine the *Human Health* potential from Appendix A. Use the same SIC doe and subcategory reference as in Factor 1. (Be sure to use the *Human Health* toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
[x] No process waste streams	0	0	[ ] 3.	3	0	[ ] 7.	7	15
[ ] 1.	1	0	[ ] 4.	4	0	[ ] 8.	8	20
[ ] 2.	2	0	[ ] 5.	5	5	[ ] 9.	9	25
			[ ] 6.	6	10	[ ] 10.	10	30

Code Number Checked: 0

Total Points Factor 4: 0

NPDES PERMIT RATING WORK SHEET

FACTOR 5: Water Quality Factors

A. *Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been to the discharge*

		Code	Points
[ ]	YES	1	10
[x]	NO	2	0

B. *Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?*

		Code	Points
[x]	YES	1	0
[ ]	NO	2	5

C. *Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?*

		Code	Points
[ ]	YES	1	10
[x]	NO	2	0

Code Number Checked: A 2 B 1 C 2

Points Factor 5: A 0 + B 0 + C 0 = **0**

FACTOR 6: Proximity to Near Coastal Waters

A. Base Score: Enter flow code here (from factor 2) 21

Check appropriate facility HPRI code (from PCS):

	HPRI#	Code	HPRI Score
[ ]	1	1	20
[ ]	2	2	0
[x]	3	3	30
[ ]	4	4	0
[ ]	5	5	20

Enter the multiplication factor that corresponds to the flow code: _____

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

HPRI code checked : 3

Base Score (HPRI Score): 30 X (Multiplication Factor) 0.1 = 3

B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

	Code	Points
[x]	1	10
[ ]	2	0

C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see instructions)?

	Code	Points
[ ]	1	10
[ ]	2	0

Code Number Checked: A 3 B 1 C NA

Points Factor 6: A 30 + B 10 + C 0 = **40**

NPDES PERMIT RATING WORK SHEET

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	0
2	Flows / Streamflow Volume	10
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	0
6	Proximity to Near Coastal Waters	40
	TOTAL (Factors 1 through 6)	**50**

S1. Is the total score equal to or grater than 80 ☐ YES; (Facility is a Major) ☒ NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

☒ NO

☐ YES; (Add 500 points to the above score and provide reason below:

Reason: _____

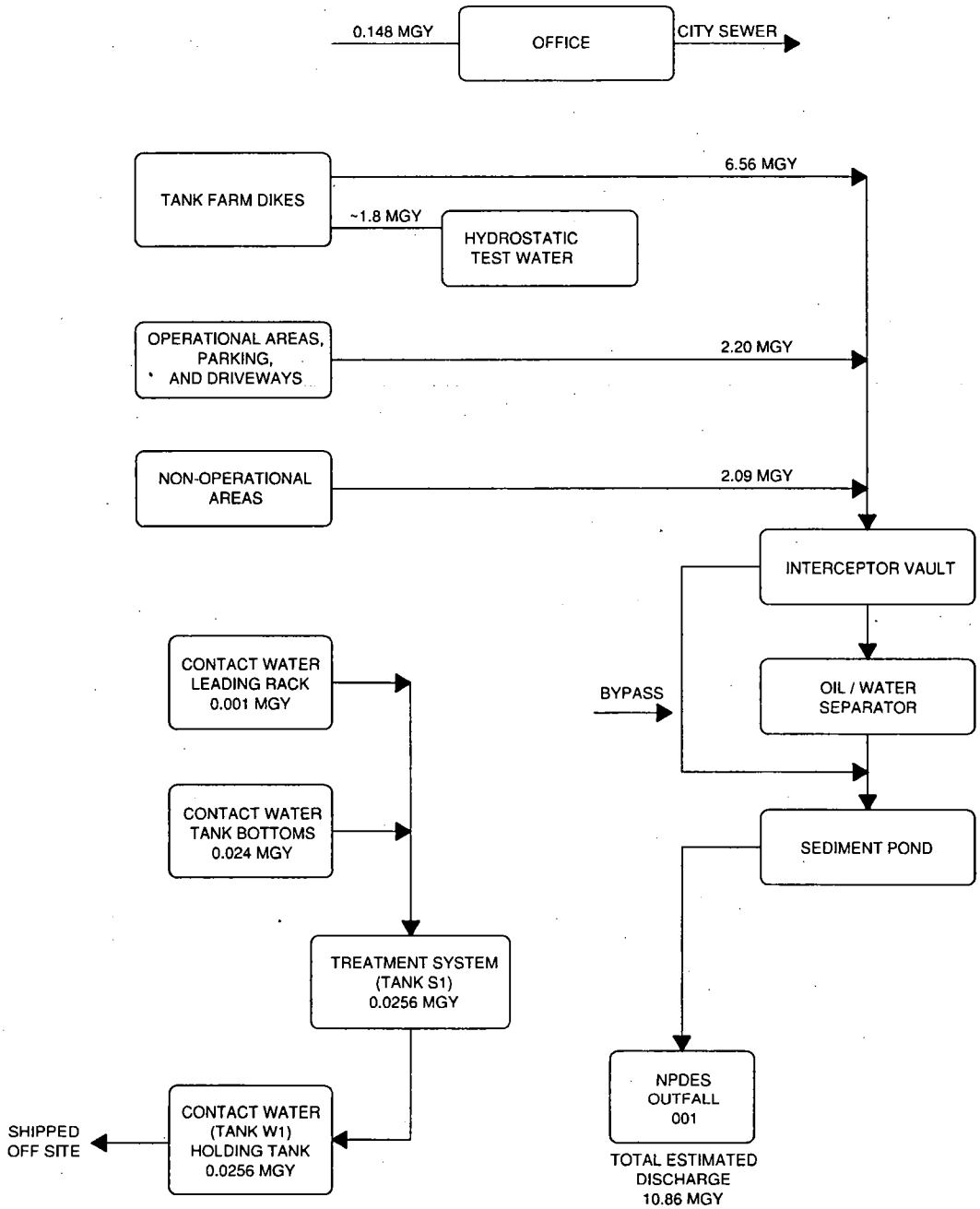
NEW SCORE : 50

OLD SCORE : 50

Permit Reviewer's Name : Susan Mackert

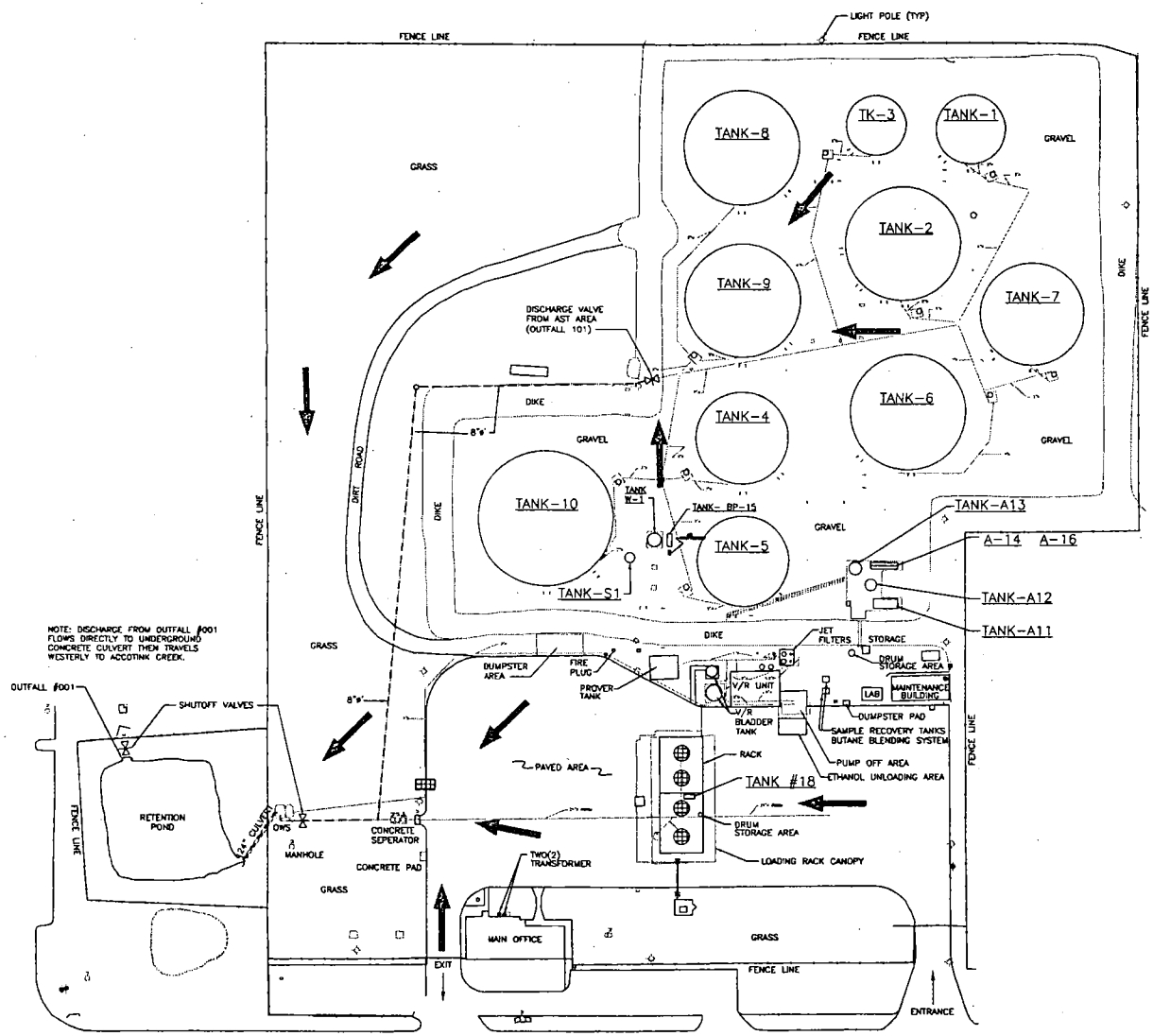
Phone Number: (703) 583-3853

Date: August 18, 2015



KINDER MORGAN SOUTHEAST TERMINALS, LLC
NEWINGTON 2 TERMINAL
8206 TERMINAL ROAD
LORTON, VIRGINIA

PROCESS FLOW DIAGRAM



LEGEND

OWS	OIL WATER SEPARATOR
	DRAIN
	MAIN STORM WATER DRAIN
	UNDERGROUND PIPING
	DRAINAGE FLOW DIRECTION

0 100 200
SCALE IN FEET

KINDER MORGAN SOUTHEAST TERMINALS, LLC
NEWINGTON 2 TERMINAL
8206 TERMINAL ROAD
LORTON, VIRGINIA

SITE PLAN

Aboveground Storage Tank Summary
VPDES Permit Renewal Application
Kinder Morgan Newington 2 Terminal
Lorton, VA

Tank ID	Substance Stored	Maximum Capacity (Gallons)
1	Ethanol	789,190
2	Gasoline	2,695,140
3	Ethanol	630,677
4	ULSD	1,391,303
5	Jet A	1,695,676
6	Gasoline	3,448,703
7	Gasoline	1,763,325
8	Jet A	2,380,638
9	Jet A	2,295,451
10	Gasoline	3,682,298
11	Empty	7,980
12	Additive	22,680
13	Empty	20,706
14	Empty	4,200
15	Jet De-icer	1,450
16	Gasoline Additive	12,096
18	Lubricity	2,500
19	Empty	225
20	Empty	1,500
W1	Contact Water	29,610
S1	Interface	18,228

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court Woodbridge, VA 22193

SUBJECT: VA0001988 – Kinder Morgan Newington Terminal 2

TO: File

FROM: Beth Biller

DATE: February 18, 2015

A site visit was performed on February 5, 2015, to verify information provided in application for permit reissuance received October 20, 2014 and familiarize myself with the facility as the new permit writer. Patrick Davis, EHS Specialist, Tetra Tech and Robert Chennis, Terminal Manager provided Jennifer Carlson, DEQ-NRO Water Resources Planner and I a tour of the facility.

- ⇨ Kinder Morgan Southeast Terminal LLC purchased the 8206 Terminal Road facility from Motiva in late 2011.
- ⇨ The facility is a petroleum product distribution terminal consisting of 9 Above Ground Storage Tanks (ASTs) that receive product from the Plantation Pipeline.
- ⇨ The ASTs are located in a graveled dike area. There is one drain located in the dike area (photo 1) that is manually controlled to release storm water to the oil/water separator. An alert light is triggered in the dike area as well as the operations office when the valve is opened.
- ⇨ The paved fuel loading area (photo 3) contains 4 bottom loading racks that are undercover. Any runoff flows to central drains that are connected to a sump pit.
- ⇨ The sump pit contains a holding tank and a water tank which is pumped and hauled off site.
- ⇨ There is a storm water drop inlet (photo 4) that will catch sheet flow from the loading racks and parking area. The storm water inlet flows to the oil/water separator.
- ⇨ Storm water and wastewater flow to the oil/water separator (photo 5). The pump is manually operated to remove oil that is removed and stored in an adjacent underground storage tank (UST).
- ⇨ Storm water and oil/water separator discharge enter the eastern side of the pond (photos 6-7).
- ⇨ Effluent from the pond discharges to a rip-rap lined bank that flows to a concrete culvert (Photos 9-10).
- ⇨ The culvert flows under Terminal Road which houses numerous industrial business and eventually daylights just east of the CSX railroad tracks and the Interstate 95/Fairfax County Parkway Intersection.

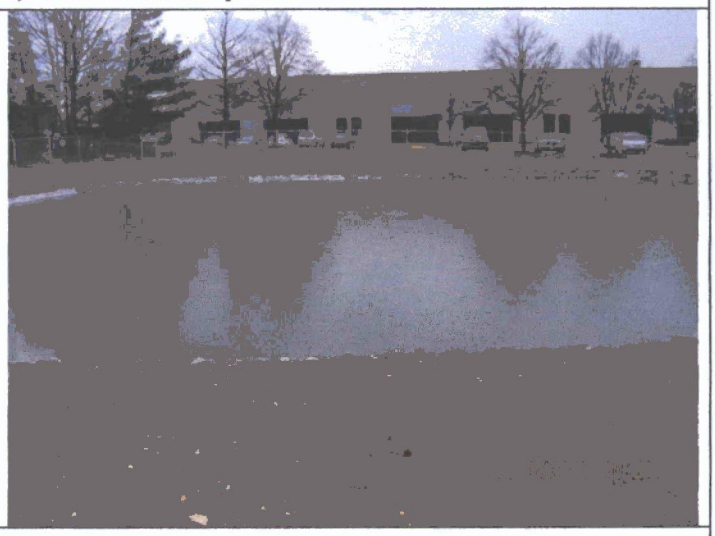
1) Storm Drain within AST Dike Area

2) Release Valve for Storm Water within Dike Area

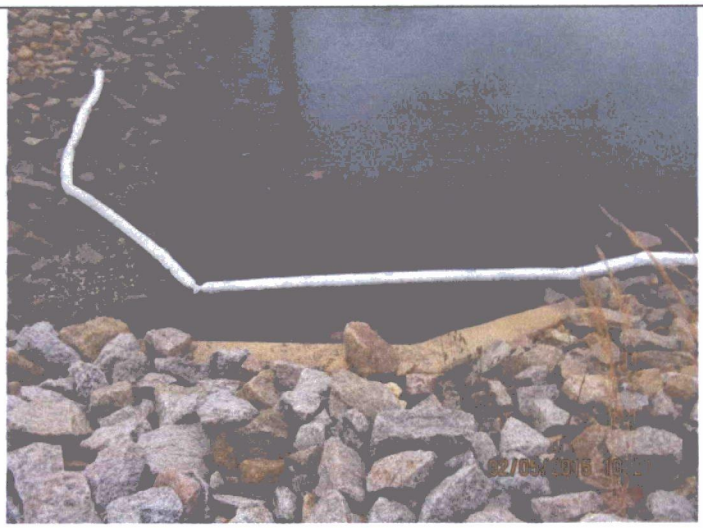
3) Fuel Loading Racks (view from Storm Drop Inlet, Photo 4)

4) Storm Water Drop Inlet

5) Oil/Water Separator



6) Storm Water Pond



7) Storm Water Pond Inlet

8) Storm Water Pond Outlet

9) Discharge Pipe to Outfall 001

10) Outfall 001

11) Discharge to UT

To:	Susan Mackert
From:	Jennifer Carlson
Date:	August 20, 2015
Subject:	Planning Statement for Kinder Morgan Newington 2 Terminal
Permit Number:	VA0001988

Information for Outfall 001:

Discharge Type: Intermittent, manual control
Discharge Flow: 0.30 MGD Avg
Receiving Stream: Accotink Creek, UT
Latitude / Longitude: 38 43 52/-77 11 38
Rivermile: 1.28 miles
Streamcode: 1aXNV
Waterbody: VAN-A15R
Water Quality Standards: Class III, Section 7, special stds. b
Drainage Area: < 5 mi^2

1. Please provide water quality monitoring information for the receiving stream segment. If there is not monitoring information for the receiving stream segment, please provide information on the nearest downstream monitoring station, including how far downstream the monitoring station is from the outfall.

   This facility discharges into an unnamed tributary to Accotink Creek, which has not been monitored or assessed. There is a downstream DEQ ambient monitoring station located on Accotink Creek. Station 1aACO004.84 is located at the Route 611 bridge crossing, approximately 1.32 miles downstream of Outfall 001. The following is the water quality summary for this segment of Accotink Creek, as taken from the 2012 Integrated Report:

   Class III, Section 7, special stds. b.

   DEQ monitoring stations located in this segment of Accotink Creek:
   - *Ambient monitoring station 1aACO002.50, at Route 1*
   - *Ambient monitoring station 1aACO004.84, at Route 611 (Telegraph Road)*
   - *Ambient monitoring station 1aACO006.10, at Route 790*
   - *Biological monitoring station 1aACO009.14, upstream of Route 636 and Fairfax County Parkway*

   The fish consumption use is assessed as not supporting due to data collected previously at DEQ's fish tissue/sediment station 1aACO004.86, at Route 611. Fish tissue data revealed exceedances of the water quality criterion based tissue value (TV) of 20 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in fish tissue were recorded in tissue from 3 species of fish (America eel, redbreast sunfish and rainbow trout) in 2004. Also, at station 1aACO002.50 in 2005, Semipermeable Membrane Device (SPMD) data revealed an exceedance of the human health criteria of 0.64 parts per billion (ppb) polychlorinated biphenyls (PCBs), which is noted by an observed effect. Additionally, exceedances of the water quality criterion based tissue value (TV) for heptachlor

epoxide and dieldrin were also noted by observed effects for the 2008 assessment. These observed effects will remain.

E. coli monitoring finds a bacterial impairment, resulting in an impaired classification for the recreation use. A bacteria TMDL has been completed and EPA approved for this segment.

Biological monitoring finds benthic macroinvertebrate impairments, resulting in an impaired classification for the aquatic life use.

The wildlife use is considered fully supporting.

2. Does this facility discharge to a stream segment on the 303(d) list? If yes, please fill out Table A.

No.

3. Are there any downstream 303(d) listed impairments that are relevant to this discharge? If yes, please fill out Table B.

Yes.

Table B. Information on Downstream 303(d) Impairments and TMDLs

Waterbody Name	Impaired Use	Cause	Distance From Outfall	TMDL completed	WLA	Basis for WLA	TMDL Schedule
Impairment Information in the 2012 Integrated Report							
Accotink Creek	Recreation	*E. coli*	1.28 miles	Lower Accotink Creek Watershed Bacteria TMDL 12/18/2008	None	Not expected to discharge pollutant	--
	Aquatic Life	Benthic Macroinvertebrates		No	--	--	2016
	Fish Consumption	PCBs		No	--	--	2022
Pohick Bay*	Aquatic Life	pH	4.8 miles	No	--	--	2024

* Please note that in the Draft 2014 Integrated Assessment, the tidal Accotink Bay segment (as well as Pohick Bay) is listed with a dissolved oxygen impairment for the aquatic life use. The Accotink Bay segment is located approximately 2.3 miles downstream of Outfall 001. The dissolved oxygen impairment will be covered by the completed TMDL for the Chesapeake Bay watershed; however, the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

Accotink Creek, which is located approximately 1.3 miles downstream from Outfall 001 is listed as impaired for benthic macroinvertebrates with a TMDL currently under development. Because this industrial facility is located within five miles upstream from a benthic impairment, it is a candidate for

nutrient monitoring. DEQ staff has concluded that the nutrient monitoring that will be required of this facility to meet Chesapeake Bay nutrient monitoring requirements is sufficient; additional nutrient monitoring will not be requested.

The same downstream segment of Accotink Creek was first listed with a PCB impairment in the 2010 Integrated Assessment. In support of the PCB TMDL that is scheduled for development by 2022, this industrial facility is a candidate for PCB monitoring. The SIC code for this facility (4226) is not specifically identified in the PCB Monitoring Guidance (09-2001) as a facility type that is subject to PCB monitoring, however the guidance allows other industrial facilities to be identified for monitoring based on additional information or staff recommendations. Total PCB results have been generated from sampling conducted at VPDES permitted facilities statewide since 2009. PCB data from Petroleum Bulk Station and Terminal facilities indicate that effluent from these facilities have the potential to contain PCBs in concentrations greater than the Virginia water quality criteria (640 pg/L). Based on this information, DEQ staff recommends that this facility perform low-level PCB monitoring during the upcoming permit cycle. It is recommended that this facility collect two samples using EPA Method 1668, which is capable of detecting low-level concentrations for all 209 PCB congeners. PCB data generated using Method 1668 revisions A, B, and C are acceptable; however, data generated using version A is preferred.

5. Fact Sheet Requirements – Please provide information regarding any drinking water intakes located within a 5 mile radius of the discharge point.

   There are no public water supply intakes located within 5 miles of this discharge.

FRESHWATER
WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Kinder Morgan Newington 2 Permit No.: VA0001988

Receiving Stream: Accotink Creek, UT Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information

Mean Hardness (as CaCO3) =		mg/L
90% Temperature (Annual) =		deg C
90% Temperature (Wet season) =		deg C
90% Maximum pH =		SU
10% Maximum pH =		SU
Tier Designation (1 or 2) =	1	
Public Water Supply (PWS) Y/N? =	n	
Trout Present Y/N? =	n	
Early Life Stages Present Y/N? =	y	

Stream Flows

1Q10 (Annual) =	0	MGD
7Q10 (Annual) =	0	MGD
30Q10 (Annual) =	0	MGD
1Q10 (Wet season) =	0	MGD
30Q10 (Wet season)	0	MGD
30Q5 =	0	MGD
Harmonic Mean =	0	MGD

Mixing Information

Annual - 1Q10 Mix =	100	%
- 7Q10 Mix =	100	%
- 30Q10 Mix =	100	%
Wet Season - 1Q10 Mix =	100	%
- 30Q10 Mix =	100	%

Effluent Information

Mean Hardness (as CaCO3) =	50	mg/L
90% Temp (Annual) =	25	deg C
90% Temp (Wet season) =		deg C
90% Maximum pH =	8	SU
10% Maximum pH =		SU
Discharge Flow =	0.03	MGD

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Acenapthene	0	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	--	--	--	--	na	9.9E+02
Acrolein	0	--	--	na	9.3E+00	--	--	na	9.3E+00	--	--	--	--	--	--	--	--	--	--	na	9.3E+00
Acrylonitrile[C]	0	--	--	na	2.5E+00	--	--	na	2.5E+00	--	--	--	--	--	--	--	--	--	--	na	2.5E+00
Aldrin [C]	0	3.0E+00	--	na	5.0E-04	3.0E+00	--	na	5.0E-04	--	--	--	--	--	--	--	--	3.0E+00	--	na	5.0E-04
Ammonia-N (mg/l) (Yearly)	0	8.41E+00	1.24E+00	na	--	8.41E+00	1.24E+00	na	--	--	--	--	--	--	--	--	--	8.41E+00	1.24E+00	na	--
Ammonia-N (mg/l) (High Flow)	0	8.41E+00	2.43E+00	na	--	8.41E+00	2.43E+00	na	--	--	--	--	--	--	--	--	--	8.41E+00	2.43E+00	na	--
Anthracene	0	--	--	na	4.0E+04	--	--	na	4.0E+04	--	--	--	--	--	--	--	--	--	--	na	4.0E+04
Antimony	0	--	--	na	6.4E+02	--	--	na	6.4E+02	--	--	--	--	--	--	--	--	--	--	na	6.4E+02
Arsenic	o	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	--	--	--	--	3.4E+02	1.5E+02	na	--
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Benzene [C]	0	--	--	na	5.1E+02	--	--	na	5.1E+02	--	--	--	--	--	--	--	--	--	--	na	5.1E+02
Benzidine[C]	0	--	--	na	2.0E-03	--	--	na	2.0E-03	--	--	--	--	--	--	--	--	--	--	na	2.0E-03
Benzo (a) anthracene [C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Benzo (b) fluoranthene [C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Benzo (k) fluoranthene [C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Benzo (a) pyrene [C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Bis2-Chloroethyl Ether [C]	0	--	--	na	5.3E+00	--	--	na	5.3E+00	--	--	--	--	--	--	--	--	--	--	na	5.3E+00
Bis2-Chloroisopropyl Ether	0	--	--	na	6.5E+04	--	--	na	6.5E+04	--	--	--	--	--	--	--	--	--	--	na	6.5E+04
Bis 2-Ethylhexyl Phthalate [C]	0	--	--	na	2.2E+01	--	--	na	2.2E+01	--	--	--	--	--	--	--	--	--	--	na	2.2E+01
Bromoform [C]	0	--	--	na	1.4E+03	--	--	na	1.4E+03	--	--	--	--	--	--	--	--	--	--	na	1.4E+03
Butylbenzylphthalate	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	--	--	--	--	na	1.9E+03
Cadmium	0	1.8E+00	6.6E-01	na	--	1.8E+00	6.6E-01	na	--	--	--	--	--	--	--	--	--	1.8E+00	6.6E-01	na	--
Carbon Tetrachloride [C]	0	--	--	na	1.6E+01	--	--	na	1.6E+01	--	--	--	--	--	--	--	--	--	--	na	1.6E+01
Chlordane [C]	0	2.4E+00	4.3E-03	na	8.1E-03	2.4E+00	4.3E-03	na	8.1E-03	--	--	--	--	--	--	--	--	2.4E+00	4.3E-03	na	8.1E-03
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	--	--	--	--	8.6E+05	2.3E+05	na	--
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.9E+01	1.1E+01	na	--
Chlorobenzene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	--	--	--	--	na	1.6E+03

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Chlorodibromomethane[C]	0	--	--	na	1.3E+02	--	--	na	1.3E+02	--	--	--	--	--	--	--	--	--	--	na	1.3E+02
Chloroform	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	--	--	--	--	na	1.1E+04
2-Chloronaphthalene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	--	--	--	--	na	1.6E+03
2-Chlorophenol	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	--	--	--	--	na	1.5E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	--	--	--	--	8.3E-02	4.1E-02	na	--
Chromium III	0	3.2E+02	4.2E+01	na	--	3.2E+02	4.2E+01	na	--	--	--	--	--	--	--	--	--	3.2E+02	4.2E+01	na	--
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.1E+01	na	--
Chromium, Total	0	--	--	1.0E+02	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Chrysene [C]	0	--	--	na	1.8E-02	--	--	na	1.8E-02	--	--	--	--	--	--	--	--	--	--	na	1.8E-02
Copper	0	7.0E+00	5.0E+00	na	--	7.0E+00	5.0E+00	na	--	--	--	--	--	--	--	--	--	7.0E+00	5.0E+00	na	--
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.2E+00	na	1.6E+04	--	--	--	--	--	--	--	--	2.2E+01	5.2E+00	na	1.6E+04
DDD [C]	0	--	--	na	3.1E-03	--	--	na	3.1E-03	--	--	--	--	--	--	--	--	--	--	na	3.1E-03
DDE [C]	0	--	--	na	2.2E-03	--	--	na	2.2E-03	--	--	--	--	--	--	--	--	--	--	na	2.2E-03
DDT [C]	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	2.2E-03	--	--	--	--	--	--	--	--	1.1E+00	1.0E-03	na	2.2E-03
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Diazinon	0	1.7E-01	1.7E-01	na	--	1.7E-01	1.7E-01	na	--	--	--	--	--	--	--	--	--	1.7E-01	1.7E-01	na	--
Dibenz(a,h)anthracene [C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
1,2-Dichlorobenzene	0	--	--	na	1.3E+03	--	--	na	1.3E+03	--	--	--	--	--	--	--	--	--	--	na	1.3E+03
1,3-Dichlorobenzene	0	--	--	na	9.6E+02	--	--	na	9.6E+02	--	--	--	--	--	--	--	--	--	--	na	9.6E+02
1,4-Dichlorobenzene	0	--	--	na	1.9E+02	--	--	na	1.9E+02	--	--	--	--	--	--	--	--	--	--	na	1.9E+02
3,3-Dichlorobenzidine[C]	0	--	--	na	2.8E-01	--	--	na	2.8E-01	--	--	--	--	--	--	--	--	--	--	na	2.8E-01
Dichlorobromomethane [C]	0	--	--	na	1.7E+02	--	--	na	1.7E+02	--	--	--	--	--	--	--	--	--	--	na	1.7E+02
1,2-Dichloroethane [C]	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	--	--	--	--	na	3.7E+02
1,1-Dichloroethylene	0	--	--	na	7.1E+03	--	--	na	7.1E+03	--	--	--	--	--	--	--	--	--	--	na	7.1E+03
1,2-trans-dichloroethylene	0	--	--	na	1.0E+04	--	--	na	1.0E+04	--	--	--	--	--	--	--	--	--	--	na	1.0E+04
2,4-Dichlorophenol	0	--	--	na	2.9E+02	--	--	na	2.9E+02	--	--	--	--	--	--	--	--	--	--	na	2.9E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,2-Dichloropropane[C]	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	--	--	--	--	na	1.5E+02
1,3-Dichloropropene [C]	0	--	--	na	2.1E+02	--	--	na	2.1E+02	--	--	--	--	--	--	--	--	--	--	na	2.1E+02
Dieldrin [C]	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.6E-02	na	5.4E-04	--	--	--	--	--	--	--	--	2.4E-01	5.6E-02	na	5.4E-04
Diethyl Phthalate	0	--	--	na	4.4E+04	--	--	na	4.4E+04	--	--	--	--	--	--	--	--	--	--	na	4.4E+04
2,4-Dimethylphenol	0	--	--	na	8.5E+02	--	--	na	8.5E+02	--	--	--	--	--	--	--	--	--	--	na	8.5E+02
Dimethyl Phthalate	0	--	--	na	1.1E+06	--	--	na	1.1E+06	--	--	--	--	--	--	--	--	--	--	na	1.1E+06
Di-n-Butyl Phthalate	0	--	--	na	4.5E+03	--	--	na	4.5E+03	--	--	--	--	--	--	--	--	--	--	na	4.5E+03
2,4 Dinitrophenol	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	--	--	na	5.3E+03
2-Methyl-4,6-Dinitrophenol	0	--	--	na	2.8E+02	--	--	na	2.8E+02	--	--	--	--	--	--	--	--	--	--	na	2.8E+02
2,4-Dinitrotoluene [C]	0	--	--	na	3.4E+01	--	--	na	3.4E+01	--	--	--	--	--	--	--	--	--	--	na	3.4E+01
Dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin	0	--	--	na	5.1E-08	--	--	na	5.1E-08	--	--	--	--	--	--	--	--	--	--	na	5.1E-08
1,2-Diphenylhydrazine[C]	0	--	--	na	2.0E+00	--	--	na	2.0E+00	--	--	--	--	--	--	--	--	--	--	na	2.0E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	8.9E+01
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	8.9E+01
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	--	--
Endosulfan Sulfate	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	na	8.9E+01
Endrin	0	8.6E-02	3.6E-02	na	6.0E-02	8.6E-02	3.6E-02	na	6.0E-02	--	--	--	--	--	--	--	--	8.6E-02	3.6E-02	na	6.0E-02
Endrin Aldehyde	0	--	--	na	3.0E-01	--	--	na	3.0E-01	--	--	--	--	--	--	--	--	--	--	na	3.0E-01

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Ethylbenzene	0	--	--	na	2.1E+03	--	--	na	2.1E+03	--	--	--	--	--	--	--	--	--	--	na	2.1E+03
Fluoranthene	0	--	--	na	1.4E+02	--	--	na	1.4E+02	--	--	--	--	--	--	--	--	--	--	na	1.4E+02
Fluorene	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	--	--	na	5.3E+03
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	--	1.0E-02	na	--
Heptachlor [C]	0	5.2E-01	3.8E-03	na	7.9E-04	5.2E-01	3.8E-03	na	7.9E-04	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	7.9E-04
Heptachlor Epoxide[C]	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.8E-03	na	3.9E-04	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	3.9E-04
Hexachlorobenzene[C]	0	--	--	na	2.9E-03	--	--	na	2.9E-03	--	--	--	--	--	--	--	--	--	--	na	2.9E-03
Hexachlorobutadiene[C]	0	--	--	na	1.8E+02	--	--	na	1.8E+02	--	--	--	--	--	--	--	--	--	--	na	1.8E+02
Hexachlorocyclohexane Alpha-BHC[C]	0	--	--	na	4.9E-02	--	--	na	4.9E-02	--	--	--	--	--	--	--	--	--	--	na	4.9E-02
Hexachlorocyclohexane Beta-BHC[C]	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	--	--	na	1.7E-01
Hexachlorocyclohexane Gamma-BHC[C] (Lindane)	0	9.5E-01	na	na	1.8E+00	9.5E-01	--	na	1.8E+00	--	--	--	--	--	--	--	--	9.5E-01	--	na	1.8E+00
Hexachlorocyclopentadiene	0	--	--	na	1.1E+03	--	--	na	1.1E+03	--	--	--	--	--	--	--	--	--	--	na	1.1E+03
Hexachloroethane[C]	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	--	--	na	3.3E+01
Hydrogen Sulfide	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	--	2.0E+00	na	--
Indeno (1,2,3-cd) pyrene [C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Iron	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Isophorone[C]	0	--	--	na	9.6E+03	--	--	na	9.6E+03	--	--	--	--	--	--	--	--	--	--	na	9.6E+03
Kepone	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Lead	0	4.9E+01	5.6E+00	na	--	4.9E+01	5.6E+00	na	--	--	--	--	--	--	--	--	--	4.9E+01	5.6E+00	na	--
Malathion	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Mercury	0	1.4E+00	7.7E-01	- -	- -	1.4E+00	7.7E-01	- -	- -	--	--	--	--	--	--	--	--	1.4E+00	7.7E-01	- -	- -
Methyl Bromide	0	--	--	na	1.5E+03	--	--	na	1.5E+03	--	--	--	--	--	--	--	--	--	--	na	1.5E+03
Methylene Chloride [C]	0	--	--	na	5.9E+03	--	--	na	5.9E+03	--	--	--	--	--	--	--	--	--	--	na	5.9E+03
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	--	3.0E-02	na	--
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Nickel	0	1.0E+02	1.1E+01	na	4.6E+03	1.0E+02	1.1E+01	na	4.6E+03	--	--	--	--	--	--	--	--	1.0E+02	1.1E+01	na	4.6E+03
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Nitrobenzene	0	--	--	na	6.9E+02	--	--	na	6.9E+02	--	--	--	--	--	--	--	--	--	--	na	6.9E+02
N-Nitrosodimethylamine[C]	0	--	--	na	3.0E+01	--	--	na	3.0E+01	--	--	--	--	--	--	--	--	--	--	na	3.0E+01
N-Nitrosodiphenylamine[C]	0	--	--	na	6.0E+01	--	--	na	6.0E+01	--	--	--	--	--	--	--	--	--	--	na	6.0E+01
N-Nitrosodi-n-propylamine[C]	0	--	--	na	5.1E+00	--	--	na	5.1E+00	--	--	--	--	--	--	--	--	--	--	na	5.1E+00
Nonylphenol	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	na	--	--	--	--	--	--	--	--	--	2.8E+01	6.6E+00	na	--
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	6.5E-02	1.3E-02	na	--
PCB Total[C]	0	--	1.4E-02	na	6.4E-04	--	1.4E-02	na	6.4E-04	--	--	--	--	--	--	--	--	--	1.4E-02	na	6.4E-04
Pentachlorophenol [C]	0	7.7E-03	5.9E-03	na	3.0E+01	7.7E-03	5.9E-03	na	3.0E+01	--	--	--	--	--	--	--	--	7.7E-03	5.9E-03	na	3.0E+01
Phenol	0	--	--	na	8.6E+05	--	--	na	8.6E+05	--	--	--	--	--	--	--	--	--	--	na	8.6E+05
Pyrene	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	--	--	--	--	na	4.0E+03
Radionuclides	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Gross Alpha Activity (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Beta and Photon Activity (mrem/yr)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Radium 226 + 228 (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Uranium (ug/l)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	4.2E+03	2.0E+01	5.0E+00	na	4.2E+03	--	--	--	--	--	--	--	--	**2.0E+01**	**5.0E+00**	**na**	**4.2E+03**
Silver	0	1.0E+00	--	na	--	1.0E+00	--	na	--	--	--	--	--	--	--	--	--	**1.0E+00**	**--**	**na**	**--**
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
1,1,2,2-Tetrachloroethane[C]	0	--	--	na	4.0E+01	--	--	na	4.0E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.0E+01**
Tetrachloroethylene[C]	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.3E+01**
Thallium	0	--	--	na	4.7E-01	--	--	na	4.7E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.7E-01**
Toluene	0	--	--	na	6.0E+03	--	--	na	6.0E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.0E+03**
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Toxaphene [C]	0	7.3E-01	2.0E-04	na	2.8E-03	7.3E-01	2.0E-04	na	2.8E-03	--	--	--	--	--	--	--	--	**7.3E-01**	**2.0E-04**	**na**	**2.8E-03**
Tributyltin	0	4.6E-01	7.2E-02	na	--	4.6E-01	7.2E-02	na	--	--	--	--	--	--	--	--	--	**4.6E-01**	**7.2E-02**	**na**	**--**
1,2,4-Trichlorobenzene	0	--	--	na	7.0E+01	--	--	na	7.0E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**7.0E+01**
1,1,2-Trichloroethane[C]	0	--	--	na	1.6E+02	--	--	na	1.6E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.6E+02**
Trichloroethylene [C]	0	--	--	na	3.0E+02	--	--	na	3.0E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.0E+02**
2,4,6-Trichlorophenol [C]	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.4E+01**
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Vinyl Chloride[C]	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.4E+01**
Zinc	0	6.5E+01	6.6E+01	na	2.6E+04	6.5E+01	6.6E+01	na	2.6E+04	--	--	--	--	--	--	--	--	**6.5E+01**	**6.6E+01**	**na**	**2.6E+04**

Notes:

1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
3. Metals measured as Dissolved, unless specified otherwise
4. "C" indicates a carcinogenic parameter
5. Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information. Antidegradation WLAs are based upon a complete mix.
6. Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
   = (0.1(WQC - background conc.) + background conc.) for human health
7. WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	6.4E+02
Arsenic	9.0E+01
Barium	na
Cadmium	3.9E-01
Chromium III	2.5E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	na
Lead	3.4E+00
Manganese	na
Mercury	4.6E-01
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

Spreadsheet for determination of WET test endpoints or WET limits

Excel 97
Revision Date: 12/13/13
File: WETLIM10.xls
(MIX.EXE required also)

Enter data in the cells with blue type:

Entry Date:	01/09/15	
Facility Name:	Kinder Morgan 2	
VPDES Number:	VA0001988	
Outfall Number:	1	
Plant Flow:	0.056	MGD
Acute 1Q10:	0	MGD
Chronic 7Q10:	0	MGD

IWC_a	100	%	Plant flow/plant flow + 1Q10
IWC_c	100	%	Plant flow/plant flow + 7Q10
Dilution, acute	1		100/IWCa
Dilution, chronic	1		100/IWCc
WLA_a	0.3		Instream criterion (0.3 TUa) X's Dilution, acute
WLA_c	1		Instream criterion (1.0 TUc) X's Dilution, chronic
$WLA_{a,c}$	3		ACR X's WLA_a - converts acute WLA to chronic units
ACR -acute/chronic ratio	10		LC50/NOEC (Default is 10 - if data are available, use tables Page 3)
CV-Coefficient of variation	0.6		Default of 0.6 - if data are available, use tables Page 2)
Constants eA	0.4109447		Default = 0.41
eB	0.6010373		Default = 0.60
eC	2.4334175		Default = 2.43
eD	2.4334175		Default = 2.43 (1 samp)

Are data available to calculate CV? (Y/N)	N	(Minimum of 10 data points, same species, needed)		Go to Page 2	
Are data available to calculate ACR? (Y/N)	N	(NOEC<LC50, do not use greater/less than data)		Go to Page 3	
No. of sample	1				
$LTA_{a,c}$	1.2328341	WLAa,c X's eA			
LTA_c	0.6010373	WLAc X's eB			
MDL** with $LTA_{a,c}$	3.000000074	TU_c	NOEC = 33.333333	(Protects from acute/chronic toxicity)	
MDL** with LTA_c	1.462574684	TU_c	NOEC = 68.372577	(Protects from chronic toxicity)	
AML with lowest LTA	1.462574684	TU_c	NOEC = 68.372577	Lowest LTA X's eD	

IF ONLY ACUTE ENDPOINT/LIMIT IS NEEDED, CONVERT MDL FROM TU_c to TU_a

MDL with $LTA_{a,c}$	0.300000007	TU_a	LC50 = 333.333325	%	Use NOAEC=100%
MDL with LTA_c	0.146257468	TU_a	LC50 = 683.725769	%	Use NOAEC=100%

Acute Endpoint/Permit Limit

ACUTE	100% =	NOAEC	LC_{50} =	NA	% Use as	NA TUa
ACUTE WLAa	0.3					

Note: Inform the permittee that if the mean of the data exceeds this TUa: 1.0 a limit may result using STATS.EXE

Use as LC_{50} in Special Condition, as TUa on DMR

Chronic Endpoint/Permit Limit

CHRONIC	1.46257468	TU_c	NOEC =	69	% Use as	1.44	TU_c
BOTH*	3.00000007	TU_c	NOEC =	34	% Use as	2.94	TU_c
AML	1.46257468	TU_c	NOEC =	69	% Use as	1.44	TU_c

ACUTE WLAa,c	3
CHRONIC WLAc	1

* Both means acute expressed as chronic

Note: Inform the permittee that if the mean of the data exceeds this TUc: 1.0 a limit may result using STATS.EXE

Use as NOEC in Special Condition, as TUc on DMR

% Flow to be used from MIX.EXE

100 %
100 %

Diffuser /modeling study?

Enter Y/N n
Acute 1 :1
Chronic 1 :1

NOTE: If the IWCa is >33%, specify the NOAEC = 100% test/endpoint for use

****The Maximum Daily Limit is calculated from the lowest LTA, X's eC. The LTAa,c and MDL using it are driven by the ACR.**

Rounded NOEC's

NOEC =	34	%
NOEC =	69	%
NOEC =	69	

Rounded LC50's

LC50 =	NA	%
LC50 =	NA	

Page 2 - Follow the directions to develop a site specific CV (coefficient of variation)

IF YOU HAVE AT LEAST 10 DATA POINTS THAT ARE QUANTIFIABLE (NOT "<" OR ">") FOR A SPECIES, ENTER THE DATA IN EITHER COLUMN "G" (VERTEBRATE) OR COLUMN "J" (INVERTEBRATE). THE 'CV' WILL BE PICKED UP FOR THE CALCULATIONS BELOW. THE DEFAULT VALUES FOR eA, eB, AND eC WILL CHANGE IF THE 'CV' IS ANYTHING OTHER THAN 0.6.

Coefficient of Variation for effluent tests

CV = 0.6 (Default 0.6)

δ^2 = 0.3074847

δ = 0.554513029

Using the log variance to develop eA

(P. 100, step 2a of TSD)

Z = 1.881 (97% probability stat from table

A = -0.88929666

eA = 0.410944686

Using the log variance to develop eB

(P. 100, step 2b of TSD)

δ_4^2 = 0.086177696

δ_4 = 0.293560379

B = -0.50909823

eB = 0.601037335

Using the log variance to develop eC

(P. 100, step 4a of TSD)

δ^2 = 0.3074847

δ = 0.554513029

C = 0.889296658

eC = 2.433417525

Using the log variance to develop eD

(P. 100, step 4b of TSD)

n = 1 This number will most likely stay as "1", for 1 sample/month.

δ_n^2 = 0.3074847

δ_n = 0.554513029

D = 0.889296658

eD = 2.433417525

	Vertebrate IC_{25} Data		St Dev	NEED DATA	NEED DATA	Invertebrate IC_{25} Data		St Dev	NEED DATA	NEED DATA
	or					or				
	LC_{50} Data	LN of data				LC_{50} Data	LN of data			
	**********					**********				
1						1				
2						2				
3						3				
4						4				
5						5				
6						6				
7						7				
8						8				
9						9				
10						10				
11						11				
12						12				
13						13				
14						14				
15						15				
16						16				
17						17				
18						18				
19						19				
20						20				
			Mean	0	0	Mean	0	0		
			Variance	0	0.000000	Variance	0	0.000000		
			CV	0		CV	0			

Page 3 - Follow directions to develop a site specific ACR (Acute to Chronic Ratio)

To determine Acute/Chronic Ratio (ACR), insert usable data below. Usable data is defined as valid paired test results, acute and chronic, tested at the same temperature, same species. The chronic NOEC must be less than the acute LC_{50}, since the ACR divides the LC_{50} by the NOEC. LC_{50}'s >100% should not be used.

Table 1. ACR using Vertebrate data

Set #	LC_{50}	NOEC	Test ACR	Logarithm	Geomean	Antilog	ACR to Use
1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
10	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
				ACR for vertebrate data:			0

Table 1. Result:	Vertebrate ACR	0
Table 2. Result:	Invertebrate ACR	0
	Lowest ACR	Default to 10

Table 2. ACR using Invertebrate data

Set #	LC_{50}	NOEC	Test ACR	Logarithm	Geomean	Antilog	ACR to Use
1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
10	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NO DATA
				ACR for vertebrate data:			0

DILUTION SERIES TO RECOMMEND

Table 4.

	Monitoring		Limit	
	% Effluent	TUc	% Effluent	TUc
Dilution series based on data mean	100	1.0		
Dilution series to use for limit			69	1.4492754
Dilution factor to recommend:	0.5		0.8306624	
Dilution series to recommend:	100.0	1.00	100.0	1.00
	50.0	2.00	83.1	1.20
	25.0	4.00	69.0	1.45
	12.5	8.00	57.3	1.74
	6.25	16.00	47.6	2.10
Extra dilutions if needed	3.12	32.05	39.5	2.53
	1.56	64.10	32.9	3.04

Table 3. Convert LC_{50}'s and NOEC's to Chronic TU's for use in WLA.EXE

ACR used: 10

	Enter LC_{50}	TUc	Enter NOEC	TUc
1		NO DATA		NO DATA
2		NO DATA		NO DATA
3		NO DATA		NO DATA
4		NO DATA		NO DATA
5		NO DATA		NO DATA
6		NO DATA		NO DATA
7		NO DATA		NO DATA
8		NO DATA		NO DATA
9		NO DATA		NO DATA
10		NO DATA		NO DATA
11		NO DATA		NO DATA
12		NO DATA		NO DATA
13		NO DATA		NO DATA
14		NO DATA		NO DATA
15		NO DATA		NO DATA
16		NO DATA		NO DATA
17		NO DATA		NO DATA
18		NO DATA		NO DATA
19		NO DATA		NO DATA
20		NO DATA		NO DATA

If WLA.EXE determines that an acute limit is needed, you need to convert the TUc answer you get to TUa and then an LC50, enter it here: NO DATA %LC_{50}

NO DATA TUa

Cell: I9
Comment:
This is assuming that the data are Type 2 data (none of the data in the data set are censored - "<" or ">").

Cell: K18
Comment: This is assuming that the data are Type 2 data (none of the data in the data set are censored - "<" or ">").

Cell: J22
Comment: Remember to change the "N" to "Y" if you have ratios entered, otherwise, they won't be used in the calculations.

Cell: C40
Comment:
If you have entered data to calculate an ACR on page 3, and this is still defaulted to "10", make sure you have selected "Y" in cell E21

Cell: C41
Comment: If you have entered data to calculate an effluent specific CV on page 2, and this is still defaulted to "0.6", make sure you have selected "Y" in cell E20

Cell: L48
Comment:
See Row 151 for the appropriate dilution series to use for these NOEC's

Cell: G62
Comment:
Vertebrates are:
Pimephales promelas
Oncorhynchus mykiss
Cyprinodon variegatus

Cell: J62
Comment:
Invertebrates are:
Ceriodaphnia dubia
Mysidopsis bahia

Cell: C117
Comment: Vertebrates are:

Pimephales promelas
Cyprinodon variegatus

Cell: M119
Comment: The ACR has been picked up from cell C34 on Page 1. If you have paired data to calculate an ACR, enter it in the tables to the left, and make sure you have a "Y" in cell E21 on Page 1. Otherwise, the default of 10 will be used to convert your acute data.

Cell: M121
Comment: If you are only concerned with acute data, you can enter it in the NOEC column for conversion and the number calculated will be equivalent to the TUa. The calculation is the same: 100/NOEC = TUc or 100/LC50 = TUa.

Cell: C138
Comment: Invertebrates are:

Ceriodaphnia dubia
Mysidopsis bahia

1/9/2015 12:26:52 PM

Facility = Kinder Morgan Terminal 2
Chemical = P. promelas
Chronic averaging period = 4
WLAa = 3
WLAc =
Q.L. = 1
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 7
Expected Value = 1
Variance = .36
C.V. = 0.6
97th percentile daily values = 2.43341
97th percentile 4 day average = 1.66379
97th percentile 30 day average= 1.20605
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are:

1
1
1
1
1
1
1

1/9/2015 12:24:57 PM

Facility = Kinder Morgan Terminal 2
Chemical = C. dubia
Chronic averaging period = 4
WLAa = 3
WLAc =
Q.L. = 1
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 7
Expected Value = 1
Variance = .36
C.V. = 0.6
97th percentile daily values = 2.43341
97th percentile 4 day average = 1.66379
97th percentile 30 day average= 1.20605
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are:

1
1
1
1
1
1
1

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
13901 Crown Court **Woodbridge, VA 22193** **(703) 583-3800**

SUBJECT: TOXICS MANAGEMENT PROGRAM (TMP) DATA REVIEW
Kinder Morgan Southeast Terminals LLC – Newington 2 (VA0001988)
REVIEWER: Douglas Frasier
DATE: 5 March 2014

PREVIOUS REVIEW: 22 February 2013

DATA REVIEWED:

This review covers the third (3rd) annual acute toxicity test conducted in April 2013 at Outfall 001.

DISCUSSION:

The results of the acute toxicity test, along with results of all previous toxicity tests conducted since 1993 on effluent samples collected from Outfall 001, are summarized in Table 1.

The acute toxicity of the effluent sample was determined with a 48-hour static non-renewal acute toxicity test using *C. dubia* as the test species. The acute test yielded a LC_{50} of > 100% effluent; thus passing the acute toxicity criterion.

CONCLUSION:

The acute toxicity tests are valid and the test results acceptable. The test results indicate that the effluent from Outfall 001 exhibits no acute toxicity to the test species *C. dubia*.

BIOMONITORING RESULTS
Kinder Morgan Southeast Terminals - Newington (VA0001988)

Table 1
Summary of Toxicity Test Results for Outfall 001

TEST DATE	TEST TYPE/ORGANISM	48-H LC_{50} (%)	% SURV	NOAEC (%)	TU_a	REMARKS
01/08/93	Acute *D. pulex*	>100	100			
01/07/94	Acute *D. pulex*	>100	100			
12/21/94	Acute *C. dubia*	>100	100			
12/06/95	Acute *C. dubia*	>100	100			
12/03/96	Acute *C. dubia*	INV.				
12/12/96	Acute *C. dubia*	< 10	0			
03/11/97	Acute *C. dubia*	>100	100			
11/25/97	Acute *C. dubia*	>100	100			
12/9/98	Acute *C. dubia*	>100	100			
Permit Reissued March 27, 2000						
5/18/00	Acute *C. dubia*	>100	100			1st annual
05/23/01	Acute *C. dubia*	>100	100			2nd annual wrong species
10/16/01	Acute *P. promelas*	>100	95			Retest
05/02/02	Acute *C. dubia*	>100	100			3rd annual
05/02/03	Acute *P. promelas*	>100	100			4th annual
05/05/04	Acute *C. dubia*	>100	100			5th annual
Permit Reissued March 28, 2005						
06/03/05	Acute *P. promelas*	>100	100	100	1	1st annual
06/13/06	Acute *C. dubia*	>100	100	100	1	2nd annual
08/08/07	Acute *P. promelas*	>100	100	100	1	3rd annual
05/07/08	Acute *C. dubia*	>100	100	100	1	4th annual
10/21/09	Acute *P. promelas*	>100	100	100	1	5th annual
Permit Reissued 20 April 2010						
12/29/11	Acute *P. promelas*	>100	100	100	1	1st annual
04/20/12	Acute *P. promelas*	>100	100	100	1	2nd annual
04/25/13	Acute *C. dubia*	>100	100	100	1	3rd annual

ABBREVIATIONS:
% SURV – Percent survival in 100% effluent
INV - Invalid

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated industrial wastewater and industrial stormwater into a water body in Fairfax County, Virginia.

PUBLIC COMMENT PERIOD: October 3, 2015 to November 2, 2015

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Industrial Wastewater and Industrial Stormwater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Kinder Morgan Southeast Terminals LLC, 1000 Windward Concourse, Suite 450, Alpharetta, GA 30005, VA0001988

NAME AND ADDRESS OF FACILITY: Kinder Morgan Southeast Terminals Newington 2, 8206 Terminal Road, Lorton, VA 22079

PROJECT DESCRIPTION: Kinder Morgan Southeast Terminals LLC has applied for a reissuance of a permit for the private Kinder Morgan Southeast Terminals Newington 2. The applicant proposes to release treated industrial wastewater and industrial stormwater at a rate of 0.03 million gallons per day into a water body. The facility proposes to release the treated industrial wastewater and industrial stormwater in an unnamed tributary to Accotink Creek in Fairfax County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, Total Suspended Solids, and Total Petroleum Hydrocarbons. The permit will monitor the following pollutants to protect water quality: Total Nitrogen, Total Kjeldahl Nitrogen, Nitrate+Nitrate, Total Phosphorus, and Acute Toxicity.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by hand-delivery, e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the draft permit and application at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.
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